

1. (Original) A video decoder for decoding macroblocks, said video decoder comprising:

a processor for decoding a set of parameters, said set of parameters comprising motion vectors indicating reference pixels associated with the macroblock;

a motion vector address computer for calculating addresses associated with motion vectors;

a video request manager for fetching a block of reference pixels at the addresses calculated by the motion vector address computer; and

a pixel reconstructor for reconstructing pixels from the macroblocks, the pixel reconstructor operable to reconstruct pixels from macroblocks encoded in accordance with a plurality of standards.

2. (Original) The video decoder of claim 1, wherein the plurality of standards comprises MPEG-2 and AVC.

3. (Currently Amended) The video decoder of claim 1, wherein the pixel reconstructor comprises:

a macroblock input buffer for storing the reference pixels; and

a ~~horizontal~~ register for storing a portion of the reference pixels.

4. (Currently Amended) The video decoder of claim 1,
wherein the pixel reconstructor comprises:

a ~~horizontal~~ data path for outputting another
portion of the reference pixels.

5. (Currently Amended) A pixel reconstructor for decoding macroblocks, said pixel reconstructor comprising:

a macroblock input buffer;

a multiplexer connected to the macroblock input buffer;

a ~~horizontal~~ register connected to the multiplexer; and

a ~~horizontal~~ data path connected in parallel to the ~~horizontal~~ register.

6. (Original) A pixel reconstructor of claim 5, further comprising:

a macroblock input buffer register connected to the multiplexer.

7. (Currently Amended) A pixel reconstructor of claim 6, further comprising:

another multiplexer connected to the ~~horizontal~~ register.

8. (Original) The pixel reconstructor of claim 7, further comprising:

a bypass path connected to the macroblock input buffer and the another multiplexer, said bypass path bypassing the multiplexer and the multiplexer input buffer register.

9. (Original) The pixel reconstructor of claim 8 to reconstruct pixels from macroblocks encoded in accordance with a plurality of standards.

10. (Original) The pixel reconstructor of claim 9, wherein the plurality of standards comprises MPEG-2 and AVC.